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ABSTRACT

In recent years, attempts to capture and leverage a firm's knowledge resources have become a primary focus in the pursuit of competitive advantage. Business leaders increasingly look to their firms' bases of knowledge as their most critical strategic resource. This trend has led to the adoption of knowledge management initiatives aimed at leveraging the knowledge of individuals to advance the economic interests of an organization. Within such an effort, knowledge sharing behavior is an essential precondition for success. This study explores the determinants of knowledge sharing by applying Ajzen's Theory of Planned Behavior to the context of knowledge management. The model provides support for an emphasis on relationship issues in the development of knowledge management programs. In addition, the model addresses both formal and informal features of organizational contexts that can affect knowledge sharing behavior. The model contributes to the study of knowledge management by addressing elements of a firm's formal policies that may promote or inadvertently discourage knowledge sharing and by providing a robust framework for the analysis of knowledge sharing.

Key Words

Knowledge sharing, Knowledge hoarding, Knowledge management, Theory of Planned Behavior.

INTRODUCTION

In recent years, attempts to capture and leverage a firm's knowledge resources have become a primary focus in the pursuit of competitive advantage. Business leaders increasingly look to their firms' bases of knowledge – on customers, markets, and business practices – as their most critical strategic resource. This emphasis on the strategic value of knowledge is deeply rooted in contemporary conceptions of a knowledge-based economy – built upon the intangible assets and skills possessed by members of firms. In response to this view, knowledge management efforts have emerged as a primary focus for business development. These initiatives seek to leverage the knowledge of individuals to advance the economic interests of the firm.

The importance of *knowledge sharing* within knowledge management can hardly be overstated. For any knowledge management effort to be successful, a firm must encourage its members and partners to share knowledge of customers, competitors, markets, and other aspects of the business environment. Based on the approach to knowledge adopted by a firm, knowledge sharing can take multiple forms, including perspective sharing (Boland & Tenkasi, 1995), shared practices or activities (Cook & Brown, 1999), and the dyadic exchange of best practices (Szulanski, 1996). As von Krogh (2003) has noted, despite its central function, knowledge sharing remains an under-addressed element in this area of study: "In order to progress fruitfully [in knowledge management research], we need to pay more attention to one of the core problems that bridge the chasm between individual and collective levels: why, under what circumstances do people share knowledge in organizations?" (p. 373). Similarly, Huber (2001) has noted that an exploration of the psycho-social determinants of knowledge sharing is foremost among unanswered research questions, which "if answered with sound studies, would enable organisations to be more effective in their transfer of knowledge" (p. 75).

Accordingly, the current research in progress proposes a structured methodology for understanding the determinants of knowledge sharing. More specifically, we apply Ajzen's (1988) *Theory of Planned Behavior* to analyze knowledge sharing by business professionals. The proposed model contributes to the study of knowledge management by incorporating elements of a firm's formal policies that may promote, *or inadvertently discourage*, knowledge sharing among firm members. In addition, the model incorporates informal aspects of organizational context that can significantly affect the willingness of professionals to share their knowledge. These informal factors include elements of a firm's professional environment and perceptions of power distributions within the organization.

MODEL OF KNOWLEDGE SHARING

The Theory of Planned Behavior (TPB; Ajzen, 1988) provides a framework for explaining and predicting the deliberate behavior of individuals within specific contexts. The theory stems from the researcher's earlier work on the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980). According to TRA, one's *attitude* toward a behavior and the *subjective norm* in the social setting combine to form the determinants of behavioral intention. Intention, in turn, is seen as the primary predictor of behavioral action. TPB builds upon TRA by introducing the antecedent of *perceived behavioral control*, which indicates that intention to act is not a sufficient determinant if an individual is inhibited by limits on personal ability to act. TPB incorporates not only the determinants of personal dispositions toward a behavior, but also the social forces and limitations of volitional control involved in an organizational setting. Thus, the model offers a fitting lens for the analysis of knowledge sharing behavior within the network of influences characteristic of a knowledge management initiative. The model of knowledge sharing proposed in the current study builds upon TPB, adapting it to the knowledge management context. The model is presented in Figure 1.

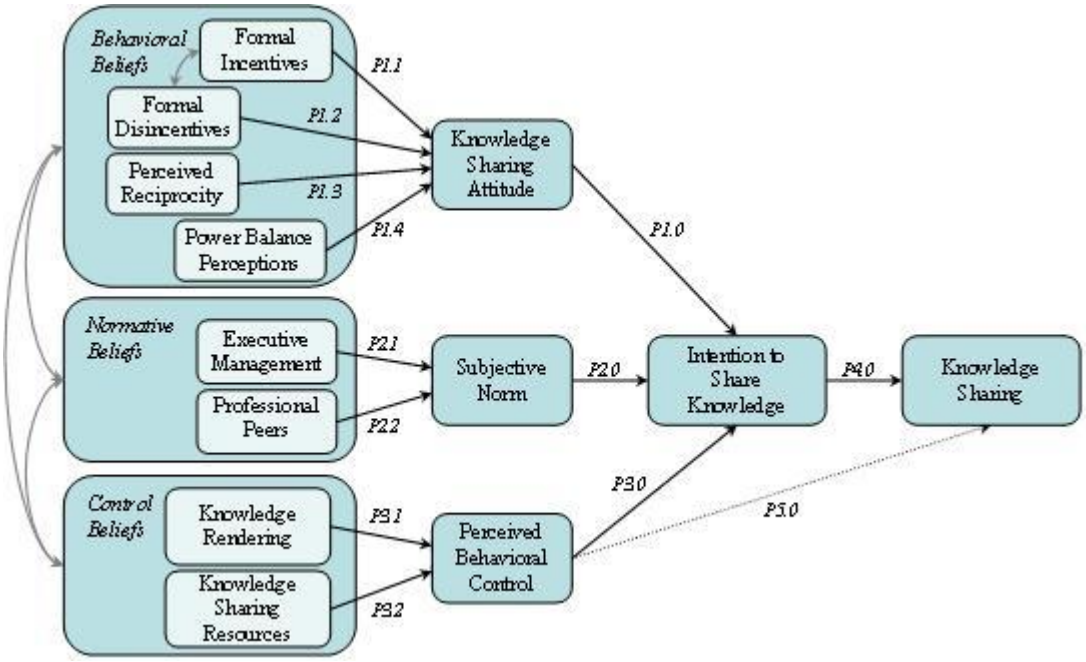

Figure 1. Knowledge Sharing Behavior Model

Attitude toward Knowledge Sharing

Following the TPB, we theorize that an individual's attitude toward knowledge sharing is a critical determinant of the intention to share knowledge.

> ***Proposition 1.0:*** *A favorable attitude toward knowledge sharing has a positive effect on the intention of business professionals to share knowledge.*

While an individual's attitude has a direct effect on the intention to share knowledge, this attitude is formed by a series of lower-order *behavioral beliefs*. For knowledge sharing, the sources of behavioral beliefs include aspects of the firm's formal compensation structure, expectations of reciprocity, and perceptions of power distribution.

Formal Incentives and Disincentives

A primary source of beliefs about the outcomes of knowledge sharing is the incentive structure of a firm. The formal incentive structure refers to the system of compensation by which individuals receive remuneration for services rendered. *Formal incentives* to share knowledge include elements of the compensation structure that reward individuals for knowledge sharing. An example of such an incentive is a bonus paid for contributions to a knowledge repository (Davenport, 1997). Several researchers have highlighted the importance of thoughtful incentive structuring to the success of knowledge management efforts (Davenport, 1997; Jarvenpaa & Staples, 2000; Santosus & Surmacz, 2001).

> ***Proposition 1.1:*** *Formal incentives to share knowledge have a positive effect on the attitude of business professionals toward knowledge sharing.*

In addition to formal incentives, a compensation structure may include elements that "dis-incent" knowledge sharing and operate, unintentionally, as *formal disincentives.* While such disincentives have received little research attention, Huber (2001) does suggest attention to unintentional consequences of management policies. Examples of formal disincentives include stack rankings for performance appraisal and other competitive review mechanisms. These competitive structures create negative ramifications to knowledge sharing.

Proposition 1.2: *Formal disincentives to share knowledge have a negative effect on the attitude of business professionals toward knowledge sharing.*

Perceived Reciprocity

The degree to which individuals believe that other business professionals will share knowledge with all members of the organization will impact their own attitude toward sharing. This concept of *perceived reciprocity* speaks to the degree to which professionals believe they will receive value from others in return for the knowledge they share. Gouldner (1960) asserts that the norm of reciprocity, by which individuals help those from whom they have received help, is among the most universal of societal principles. In addition, Bock & Kim (2002) have noted the importance of reciprocity in the context of knowledge management efforts.

Proposition 1.3: *The belief of likely reciprocity in knowledge sharing behavior has a positive effect on the attitude of business professionals toward knowledge sharing.*

Power Dynamics

It has been noted that knowledge management entails an inherently political component (Davenport, 1997). In organizations marked by asymmetries of power, unique knowledge about customers or other aspects of the business environment is a source of relative power. Thus, sharing of that knowledge may be expected to shift power away from the sharing individual (Markus, 1983; Kling, 1980). In this context then, *power balance perceptions* refer to beliefs regarding the outcome of knowledge sharing behavior on the balance of organizational power between oneself and others.

Proposition 1.4: *The belief that knowledge sharing is likely to result in the loss of individual power has a negative effect on the attitude of business professionals toward knowledge sharing.*

Subjective Norm

In keeping with TPB, we theorize that the perception that relevant others want one to engage in knowledge sharing behavior has a positive effect on the intention to share knowledge.

Proposition 2.0: *A favorable subjective norm toward knowledge sharing has a positive effect on the intention to share knowledge.*

The *normative beliefs* upon which the subjective norm construct is formed are beliefs about the expectations and attitudes of important others. In contemporary business environments, these others may include members of executive management and professional peers. Brown et al. (2002) have noted that superiors and peers represent stakeholder groups whose influence on one's subjective norm may differ.

Executive Management Expectations

Members of executive management have authority over one's compensation, performance appraisal, and overall professional advancement. Thus, it is proposed that one's subjective norm will be affected by beliefs about the expectations of superiors and organizational leaders.

Proposition 2.1: *The belief that executive management expects knowledge sharing behavior has a positive effect on one's subjective norm toward knowledge sharing behavior.*

Peer Expectations

Professional peers often do not have explicit authority over an individual professional, but they represent an essential influence on one's work experience. Therefore, normative beliefs about their expectations will influence one's overall subjective norm regarding an action.

Proposition 2.2: *The belief that professional peers expect knowledge sharing has a positive effect on one's subjective norm toward knowledge sharing behavior.*

Perceived Behavioral Control

Following TPB, we theorize that the perception of significant volitional control over one's behavior has a positive effect on knowledge sharing. That is, the perception that one is able to engage in knowledge sharing with relative ease, and few obstacles, will positively affect intention to share knowledge.

Proposition 3.0: *A high level of perceived behavioral control in knowledge sharing has a positive effect on the intention of business professionals to share knowledge.*

Perceived behavioral control is derived from beliefs about the presence of factors that may facilitate or impede knowledge sharing. Ajzen (1991) notes that perceived behavioral control is closely related to the concept of perceived self-efficacy developed by Bandura (1977) – "judgments of how well one can execute courses of action required to deal with prospective situations" (p. 122). In this context, *control beliefs* are perceptions about the means provided for knowledge rendering and retrieval.

Knowledge Rendering

The degree to which an individual believes that a particular type of knowledge is conducive to effective rendering is likely to influence perceptions of one's ability to share knowledge. If an individual feels that relevant knowledge cannot be rendered effectively in an expected manner (e.g., text-based repository), then one is likely to believe that sharing is untenable. In other words, one will perceive reduced behavioral control because of inhibiting conditions.

Proposition 3.1: *The belief that knowledge can be effectively rendered through a given mechanism has a positive effect on one's perceived behavioral control in knowledge sharing.*

Knowledge Sharing Resources

A second component of perceived control of knowledge sharing behavior deals with the expected format for sharing knowledge. The perceived ease of sharing knowledge can be influenced by the tools available for pursuing the behavior. If the resources provided to business professionals offer sufficient flexibility to incorporate less traditionally-explicit forms of knowledge, then detrimental effects on perceived behavioral control may be mitigated.

Proposition 3.2: *The perceived ease of use and appropriateness of knowledge management system resources has a positive effect on one's perceived behavioral control in knowledge sharing.*

Intention and Behavioral Control

According to TPB, an intention is a significant predictor of action, because it measures one's readiness to perform the given behavior. Furthermore, another direct predictor of action is one's perception of ability to engage in that given behavior (i.e., perceived behavioral control). Therefore, both intention and perceived behavioral control are antecedents of knowledge sharing behavior.

Proposition 4.0: *The intention to share knowledge has a positive effect on the actual behavior.*

Proposition 5.0: *A high level of perceived behavioral control of knowledge sharing has a positive effect on the actual behavior of knowledge sharing.*

The current model combines the framework for analysis of volitional action provided by TPB with dynamics observed in the study of knowledge management. In so doing, the model provides the structure for a systematic analysis of the social and technical determinants of knowledge sharing behavior on the part of business professionals. In addition, the model develops the propositions necessary for testing the efficacy of TPB in a knowledge management context.

METHODOLOGY AND RESEARCH DESIGN

For an effective test of the propositions developed in the model, the study incorporates the assessment of an environment in which knowledge management has been widely employed. Specifically, we focus on the use of knowledge management within the financial services sector. The focus on financial services is motivated by several considerations. First, financial services is a market that has aggressively pursued knowledge management in recent years. Secondly, the sector employs multiple classes of knowledge professionals (e.g., portfolio managers, financial planners). Finally, sales and service features are critical elements of market performance in financial services, and these business tasks have received considerable attention in knowledge management efforts (e.g., CRM).

Given the nature of the phenomenon investigated, the unit of analysis for the study is individual business professionals in the financial services sector. Data will be collected from individuals in multiple professional classes. A set of 20 in-depth

interviews will be conducted with firm representatives at multiple organizational levels to provide qualitative data regarding perceptions of knowledge sharing. Following these interviews, the main data collection effort will utilize a survey of financial services professionals. The survey instrument will be developed based on a combination of the literature review and the results of the qualitative data collection efforts. The instrument will be thoroughly tested to ensure construct validity and appropriateness for the focal phenomenon. Upon completion of instrument development and refinement, the survey will be administered online to representatives in eight participating financial services firms. Thorough analysis of both the qualitative and quantitative data will be conducted to assess the validity of the proposed model and the applicability of TPB to the study of knowledge management.

CONCLUSION AND NEXT STEPS

The dynamics of knowledge sharing behavior within the context of enterprise knowledge management initiatives remain an under-addressed facet of knowledge management research. Through the application of TPB, the current model sets the stage for an analysis of the dispositional, social, and contextual forces that promote or inhibit knowledge sharing by business professionals. The model contributes to knowledge management research through the recognition of organizational policies that may inadvertently discourage knowledge sharing behavior, while incorporating informal contextual components (e.g., competitive elements of the professional environment, perceptions of power distribution) that can affect the willingness of professionals to share knowledge. In initiating next steps, several financial services firms have been approached about participation in the study and a number of preliminary interviews have been conducted. The qualitative data collection phase will be completed and analyzed by early summer. Preliminary results and quantitative phase development will be presented at the AMCIS conference.

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